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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/634,045	08/08/2000	Drew Eric Wingard	02998.P011	5608

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EXAMINER

THOMPSON, ANNETTE M

ART UNIT PAPER NUMBER

2825

DATE MAILED: 04/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/634,045

Applicant(s)

WINGARD ET AL.

Examiner

A. M. Thompson

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 February 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Applicants' amendment to 09/634,045 has been examined and remarks carefully considered. Claims 1-11 are cancelled. Claims 12-22 are added. Claims 12-22 are pending.

Claim Objections

1. Claims 12, 16, 18 and 20 are objected to because of the following informalities: Pursuant to claim 12, at line 3, after "least", delete "of". Pursuant to claim 16, line 4 requires rephrasing; consider the following or some variation thereof: *at least a first interface signal carrier of the plurality of interface signal carriers*. Pursuant to claim 18, at line 1, change "a" to - -the-6-; at line 3, change "physical" to - -physically- -. Pursuant to claim 20, at line 2, after "first", insert - -interface- -. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Rejection of claims 12-22

3. Claims 12-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blodget, U.S. Patent 6,510,546. Blodget discloses a method and apparatus for developing parameterizable logic cores at compilation (Abstract, col. 4, ll. 3-17). In Blodget, program code representative of a logic core function (col. 4, ll. 3-18) may be changed or parameterized at compilation (run-time) to define a variable interface

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(interconnect) width or size. Blodget also discloses an interface that supports different levels of functionality (col. 4, ll. 3-18). Blodget, however, does not explicitly disclose or use Applicants' terminology of "first signal interface carrier" or "interface signal carrier being physically present". However, Blodget discloses interconnect resources and the editing of program code to define specific interconnect resources (i.e. define what is physically present or not) and it would have been obvious to one of ordinary skill in the art at the time of Applicants' invention that Applicants' limitation elements are at least within the scope of Blodget's disclosure.

4. Pursuant to claim 12 which recites [a] computer core having an interface to communicate with other cores wherein the interface contains a plurality of interface signal carriers that are configurable (col. 2, ll. 41-53 wherein at compilation is suggested by "run-time reconfiguration"), at compilation, such that at least one of the interface signal carriers is selectively physically present in the interface or not physically present (col. 5, ll. 15-17, wherein a bit interface program is called to program specific interconnect resources), wherein not physically present means that a route connection is not generated for an interface signal carrier selected to be not physically present (see also, col. 5, ll. 34-48, wherein the interconnect resources are programmed in the code; see also col. 10, ll. 8-13 wherein output pins and input pins are defined).

5. Pursuant to claim 13 wherein the computer core is a core on a system on a chip and the other cores also belong to that system on a chip (col. 3, line 64 to col. 4, line 2).

6. Pursuant to claim 14, wherein a first interface signal carrier is further configured to support different levels of functionality for the interface (col. 4, ll. 6-18 ("...some of the functions in the set may be programmed for certain devices. ...")).

7. Pursuant to claim 15, wherein a signal carrier width of the first interface signal carrier is also configurable to support different signal widths (col. 5, ll. 43-50, wherein the interconnect resource can be changed via an index).

8. Pursuant to claim 16, which recites a core on a system on a chip having an interface, wherein the interface contains a plurality of interface signal carriers that are configurable, at compilation, such that at least one of a first interface signal carrier is configurable to support different levels of functionality for the interface (col. 4, ll. 3-15).

9. Pursuant to claim 17, wherein a signal carrier width of the first interface signal carrier is also configurable to support different signal widths (col. 5, ll. 43-50).

10. Pursuant to claim 18, wherein a first interface signal carrier is configurable, at compilation, such that the first interface signal carrier is selectively physically present in the interface or not physically present.

11. Pursuant to claim 19, which recites [a] method for generating at compilation a core interface for a system on a chip to enable re-use of the core with a different interface configuration (col. 4, ll. 65-67), the method comprising: providing configurable source code representative of the core interface for the system on a chip and identifying parameters of the core interface; defining configuration parameters of the core interface; generating the core interface for the system on a chip from the configurable source code representative of the core interface and the identified parameters of the core

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interface configurable in accordance with the defined configuration parameters of the core interface (col. 5, line 60 to col. 6, line 63).

12. Pursuant to claim 20, wherein at least one of the configuration parameters of the core interface is defining whether a first signal carrier will be physically present in the core interface or not physically present (col. 5, ll. 34-50).

13. Pursuant to claim 21, wherein at least one of the configuration parameters of the core interface is defining different levels of functionality that the core interface supports through a plurality of signal interface carriers (col. 4, ll. 3-18).

14. Pursuant to claim 22, wherein at least one of the configuration parameters of the core interface is defining a signal width of a first interface signal carrier (col. 5, ll. 34-50).

Remarks

15. Although new claims 12-22 more clearly define Applicants' invention, reconsideration of these claims regrettably does not result in a notice of allowance for the reasons cited herein, supra. The prior art of Blodget, '546, suggests, if not discloses, Applicants' invention, and accordingly, this final action on the merits now issues.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please reference the PTO-892 for a complete listing.

17. Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

18. Any inquiry concerning this communication or earlier communications should be directed to Examiner A.M. Thompson whose telephone number is (571) 272-1909. The Examiner can usually be reached Monday thru Friday from 8:00 a.m. to 4:30 p.m.. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Matthew S. Smith, can be reached on (571) 272-1907.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1562 or the Customer Service Center whose telephone number is (571) 272-1750.

19. Responses to this action should be mailed to the appropriate mail stop:

Mail Stop _____
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

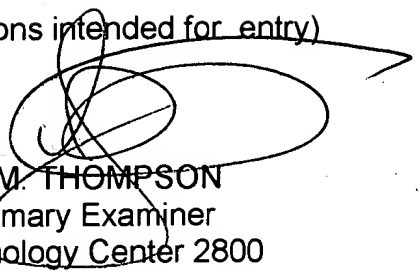
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or faxed to:

(703) 872-9306, (for all **OFFICIAL** communications intended for entry)



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